First Preliminary Amendment

AMENDMENTS TO THE SPECIFICATION

IN THE TITLE:

Please amend the title as it appears in the U.S. Patent and Trademark Office's records and

on the first page of the specification, as follows:

--HEAT DISSIPATING DEVICE WITH A COMBINATION BEARING ASSEMBLY

HAVING MAGNETIC BEARING RINGS AND A SLEEVE BEARING--

IN THE SPECIFICATION:

Please amend the paragraph beginning on page 4, line 15 as follows:

-- Figs. 3(a) to 3(c) are schematic diagrams of the magnetic bearing assembly applied to a

cooling fan according to the first embodiment of the present invention. The cooling fan includes

a rotor 6, and a base 23. The rotor 6 has an impeller 61, a hub 62 and a shaft 21. The base 23 is

for supporting the rotor 6. The magnetic bearing assembly includes a magnetic portion and a

bearing portion disposed on the inner side of the hub 62. The bearing portion is a sleeve bearing

5. The magnetic portion includes an upper magnetic portion constituted by three magnetic rings

51, 52 and 53, and a lower magnetic portion composed of three magnetic rings 511, 521 and 531.

In the upper magnetic portion, the first magnetic ring 51 and the third magnetic ring 53 are

coupled to the base 23 shaft 21 of a frame 4 of the cooling fan and the second magnetic ring 52 is

connected to the shaft 21 base 23 of a frame 4 of the cooling fan. The second magnetic ring 52

and the third magnetic ring 53 are disposed in a radial alignment, wherein these two rings are

assembled with each other to have the same polar disposition to have the same poles on the

opposing ends respectively for generating the repulsive magnetic field. In addition, the first

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magnetic ring 51 and the second magnetic ring 52 are disposed in an axial alignment, wherein

the first magnetic ring 51 and the second magnetic ring 52 are assembled to have the same poles

on the opposing ends respectively to have an opposite polar disposition for generating an axially

repulsive magnetic field. The radially repulsive magnetic field generated between the second

magnetic ring 52 and the third magnetic ring 53, and the axially repulsive magnetic field

generated between the first magnetic ring 51 and the second magnetic ring 52 allow to reduce the

friction between the sleeve bearing 5 and the shaft 21 upon rotation of the shaft (as shown in Fig.

3(a)). Alternatively, the three magnetic ring 51, 52, and 53 can have different disposition,

wherein the axially magnetic forces are repulsive magnetic forces and radially magnetic forces

are attractive magnetic forces. That is, the second magnetic ring 52 and the third magnetic ring

53 are assembled to have opposite poles on the opposing ends respectively for generating axially

attractive magnetic force while the disposition of the first and second magnetic rings 52, 53

remain the same (as shown in Fig. 3(b)). Likewise, the three magnetic rings 511, 521 and 531 in

the lower magnetic portion are disposed symmetrically in the same fashion as the three magnetic

rings 51, 52 and 53 in the upper portion, can effectively reduce reducing the friction between the

sleeve bearing 5 and the shaft 21 upon the operation of the cooling fan.--

Please amend the paragraph which was added in the April 25, 2005 Amendment before

the paragraph beginning on page 5, line 11, as follows:

--Otherwise, the first magnetic ring 51, 511 and the second magnetic ring 52, 521 are

disposed in an axial alignment with each other to have an opposite polar disposition assembled to

have opposite poles on the opposing ends respectively for generating axially attractive force

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while the second magnetic ring 52, 521 and the third magnetic ring 53, 531 are assembled to have the same poles on the opposing ends respectively for generating radially repulsive force (as shown in Fig. 3(c)). This arrangement can also function to successfully reduce the friction between the sleeve bearing 5 and the shaft 21 upon the operation of the cooling fan.--

Please amend the paragraph beginning on page 5, line 17 as follows:

--Figs. 4(a) to 4(c) are schematic diagrams of the magnetic bearing assembly applied to the cooling fan according to the second embodiment of the present invention. The cooling fan includes a rotor 6, and a base 23. The rotor 6 has an impeller 61 and a shaft 21. The base 23 is for supporting the rotor 6. The magnetic bearing assembly includes a magnetic portion and a bearing portion. The bearing portion is a sleeve bearing 5. The magnetic portion includes an upper magnetic portion having an inner magnetic ring 73 and an outer magnetic ring 74, and a lower magnetic portion having three magnetic rings 75, 76 and 77. In the upper magnetic portion, the inner magnetic ring 73 is connected to the shaft 21 and the outer magnetic ring 74 is connected to the base 23 of the frame of the cooling fan. These two magnetic rings 73 and 74 are disposed in a radial alignment-with-each other to have the same polar disposition to have the same poles on the opposing ends respectively for generating a repulsive magnetic force. In the lower magnetic portion, the first magnetic ring 75 and the third magnetic ring 77 are connected to the shaft 21 and the second magnetic ring is connected to the base 23. These three magnetic rings 75, 76 and 77 are disposed in an axial alignment to have the opposite polar disposition to have the same poles on the opposing ends respectively for generating the axially repulsive magnetic forces (as shown in Fig. 4(a)). Alternatively, the inner magnetic ring 73 and the outer

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magnetic ring 74 can be disposed in a radial alignment with each other to have an opposite polar

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disposition to have opposite poles on the opposing ends respectively (as shown in Fig. 4(b)).

Likewise, the first magnetic ring 75, the second magnetic ring 76 and the third magnetic ring 77

can also be disposed in an axial alignment with each other to have an identical polar disposition

for generating axially attractive magnetic forces (as shown in Fig. 4(c)). Therefore, the friction

between the sleeve bearing 5 and the shaft 21 upon the rotation of the cooling fan is considerably

reduced.--

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